EG Technical Briefing
No. 6, February 2004

Central Bank Independence: Theory & Empirical Results

BACKGROUND

Over the last few decades, many developing countries have struggled to achieve macroeconomic stability, including price level stability (zero or low inflation), sometimes referred to as price stability, a key part of the enabling environment for rapid economic growth. But macroeconomic stability has been elusive. In particular, episodes of inflation in the high single-or even double- digits have proved hard to avoid, and some countries have even suffered debilitating episodes of hyperinflation. As a result, an increasing number of countries have adopted policies aimed at increasing the independence of their central bank in using the instruments of monetary policy (*e.g.*, rediscount rate, open market operations) to achieve price level stability.

THEORY

The theory supporting central bank independence (CBI) as a means of achieving price stability is based on the view that governments have an inflationary (*i.e.*, expansionary) bias with respect to their fiscal management and other economic policies. In order to achieve price stability, in spite of the government's presumably expansionary fiscal policy bias, it is argued that monetary policy needs to be the province of an independent institution (*i.e.*, the central bank) and that the central bank needs to be given a "conservative" mandate to guide its policies. In the literature on CBI, "conservative" is taken to mean a relatively higher degree of inflation aversion than exists in the government. Of course, mandates given to the central bank are not necessarily limited to price stability, but can include other macroeconomic goals. However, too many mandates may in effect mean no mandate for anything. It is also important that policy mandates and policy instrument independence (effectively the means for achieving the mandate) be combined with accountability for achieving the mandate(s).

The arguments for CBI are primarily aimed at securing independence for the monetary authority to use monetary policy instruments (such as open market policy) to achieve price level stability without being constrained in the utilization of these instruments by any other entity such as the finance ministry or the legislature. The central bank must be given a clear mandate to achieve price level stability even at the expense of other goals. The finance ministry, for example, is not to be allowed to override the price stability goal by requiring the central bank to accommodate, say by making offsetting open market purchases of existing government debt, expansionary fiscal policy. To carry out expansionary, deficit-creating policies, the finance ministry must pay higher interest rates, in order for the central bank to be allowed to pursue its mandated price level stability goal. By the same token, the central bank is not allowed to force the finance ministry, or even tell it publicly, to rein in public spending. The policy goals of each are independent of one another.

An additional reason to support central bank independence is that it may promote more effective supervision and regulation of the banking system. (Although bank supervision authority and responsibilities may be and sometimes are vested in an agency or agencies other than the central bank, any such agency or agencies should also have independence to do the bank supervisory job and be held accountable for doing it.) The theory on this point is similar to the price stability point, that an independent authority should be a more reliable steward of the bank supervisory functions. However, empirical work by Barth, Caprio, and Levine (2001) did not find a significant relationship between CBI and bank supervisory quality. There are likely to be specific country cases, however, where a solid argument for CBI to improve bank supervision can be made.

Technical Briefings is published by USAID's Office of Economic Growth in Washington, DC. This publication aims to share technical and analytical information with USAID field missions, as well as the economic, private sector, and agricultural development program officers. Any views, interpretations, and conclusions expressed in ***Technical Briefings*** are those of the author (s) alone and do not represent any official views of USAID or the U.S. Government. If you have feedback, suggestions or ideas about Technical Briefings, please contact Jim Elliott (jelliott@usaid.gov) Suggestions for subjects are always welcome. This briefing was authored by Michael Shea and Jim Elliott.

Achieving CBI may involve adopting legal and institutional changes in a variety of areas. The status of the chief executive officer of the central bank must be defined, including a term of office, and appointment and dismissal methods that facilitate independence. The bank's role in policy formulation must also be defined, including the potential involvement of the central bank in the budget process and regulations on potential conflicts between the central bank and the government. Objectives and mandates for the central bank must be legislated. Regulations on limitations on central bank lending must be installed.

MEASUREMENT

Two types of indicators are commonly typically used to measure CBI: legal independence of the institution and the turnover rate of the central bank governors. (The turnover rate is seen as a useful proxy for measuring the *actual*, rather than merely the legal, independence of the central bank.) The Cukierman and the Grilli-Masciandaro-Tabellini (GMT) indices are two ways, among others, to measure CBI. The two indices measure very similar items, but have slightly different scoring methods and sub-item definitions, and can lead to similar, but not matching, results. For example, the Cukierman Index for Slovenia in the late 1990s was 0.6 on a range from zero to one, equaling sixty percent of the possible points. The GMT Index for Slovenia around the same time was 12 on a range of zero to 16, equaling seventy-five percent of the possible points.

EMPIRICAL RESULTS

Various studies have found a correlation between higher degrees of CBI and lower average inflation: Lybek (IMF WP/9/4) found that a higher degree of *de jure* CBI and accountability was positively correlated with lower average inflation in Russia, the Baltics, and other FSU countries during 1995-97; Walsh (1997) found that CBI was significant in explaining inflation in the OECD countries during 1973-1993; and De Haan and Kooi (2000) used a cross section of 97 developing countries to find that CBI is robustly related to inflation, but not to economic growth rates. Some of the studies on CBI have found not only that average inflation is lower with higher CBI, but also that the average trade-off between inflation and output is more favorable. Of course, many studies also consider a wide range of relevant institutional characteristics of countries, *e.g.*, size of financial sector, centralization of wage bargaining, openness of economy, and political stability.

REFERENCES

Barth, Caprio, & Levine, 2001. "Bank Regulation and Supervision. What Works Best?" World Bank, Policy Research Working Paper 2725.

Berger, de Haan, & Eijiffinger, 2001. "Central Bank Independence: An Update of Theory and Evidence." *Journal of Economic Surveys* (15:1), pages 3-40.

Cukierman, 1992. *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*, MIT Press (Cambridge): pages 371-455.

De Haan and Kooi, 2000. "Does Central Bank Independence Really Matter? New Evidence for Developing Countries Using a New Indicator." *Journal of Banking and Finance* (24), pages 643-664.

Grilli, Masciandaro, & Tabellini, 1991. "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries." *Economic Policy* (October), pages 341-392.